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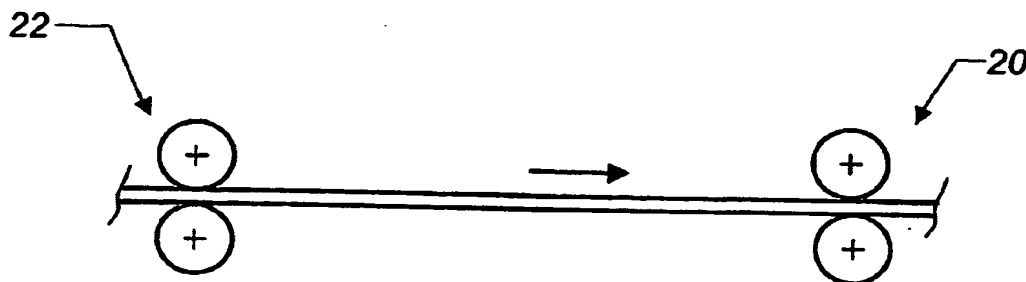
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(54) Title: METHOD, USE AND DEVICE RELATING TO NUCLEAR LIGHT WATER REACTORS



(57) Abstract: The invention concerns a method of producing and treating a sheet suited to be used as a component or as a part of a component (2, 12, 14, 16) in a fuel assembly for a nuclear light water reactor, which method comprises the following steps: a) producing a sheet of a suitable Zr-based alloy by forging, hot rolling and cold rolling in a suitable number of steps, b) carrying out an  $\alpha+\beta$  quenching or a  $\beta$  quenching of the sheet when the sheet has been produced to a thickness which is equal to or almost equal to the final thickness of the finished sheet, c) heat treatment of the sheet in the  $\alpha$ -phase temperature range of said alloy, wherein a stretching of the sheet is carried out during the heat treatment according to step c). The invention also concerns a use of a sheet that is produced and treated according to this method, and to methods and fuel assemblies of which said sheet forms a part.

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